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REMARKS

This paper is being filed concurrently with the filing of a Request for Continued Examination (RCE) under 37 CFR 1.114 and is responsive to the Examiner's Final Action of March 9, 2005. Claim 1 is amended to distinguish over the Bennett reference.

Rejection of claims 1-8 for obviousness

The Examiner rejects claims 1-8 under 35 U.S.C. 103(a) as being unpatentable over Nutten et al United States Patent 3,428,406 in view of Reichhelm United States Patent 3,361,183 and Bennett United States Patent 4,061,463.

The Examiner recognizes that Nutten et al do not teach a metering valve or an infrared burner as does the present application and in respect of which both are included in the claims under consideration. The Examiner, however, points to Reichhelm who uses both a liquid fuel control valve and an air supply valve to adjust his start up flame. The present application teaches a single valve to adjust the fuel supply and BTU output and Reichhelm does not teach or suggest this in his disclosure by using his two valves. Bennett may indeed teach an infrared burner but the infrared burner of Bennett requires a premixture of fuel and air before the burner is reached. This is not an infrared burner according to the present application where the air and fuel are mixed within the nozzle and combusted downstream.

The Examiner states that the claims under consideration do not require that "only" a fuel adjustment valve to be present. This is true. The claims require a first valve for adjusting the fuel supply and no other valve is set forth. The Examiner says that a single valve is taught by Reichhelm. That is true. Reichhelm also teaches a second valve for his air supply. The point is that the Examiner's rejection is not a rejection based on anticipation under 35

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U.S.C. 102 where a claim is anticipated if the elements of a single reference are all enumerated in the claims under consideration. This is a rejection for obviousness under 35 U.S.C. 103 and the Examiner cannot, as is a fundamental tenet, pick and choose the elements set forth in a plurality of references to reject the claims. The references must be capable of being combined to form the invention under consideration in the claims and applicant has previously and at great length set forth the reasons why these three references cannot be combined to form the present invention. For the record, however, Nutten et al do not teach a metering valve. Nutten et al teach a "manually operable valve 58" which either provides fuel to the burner or "...cut[s]...off the fuel supply when desired." See response dated June 7, 2003, page 2. Reichelm does not teach a single metering valve. Reichelm teaches both a fuel supply valve and an air supply valve. And Bennett uses a premix system for his burner and does not teach an infrared nozzle where the mixture of his air and fuel are mixed within the nozzle according to the present invention and as now is enumerated in the claims under consideration.

Since it is clear the three references cited by the Examiner cannot be combined to form the present invention as has been set forth numerous times, this case is in condition for allowance and action to that end is requested.

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Respectfully submitted,

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Per:

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